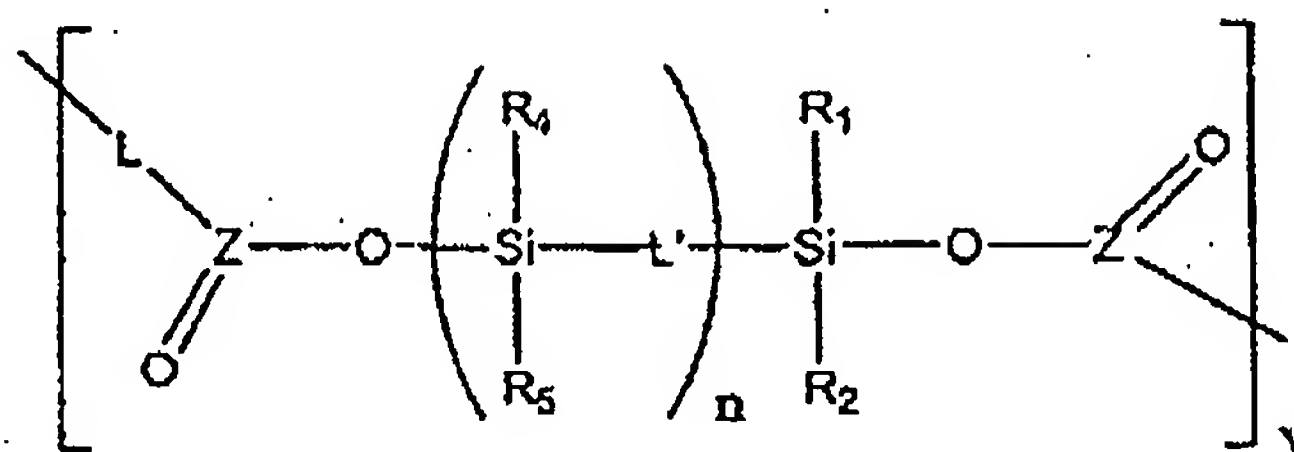


LISTING OF CLAIMS

1. (Currently Amended) A process for the preparation of poly(silyl ester)s comprising a structural unit of the formula (I)



(I)

wherein each R_4 and R_5 may be is hydroxyl or may be is independently selected from hydrogen, alkyl, cycloalkyl, aryl, alkoxy, aryloxy, $-L'-SiR_1R_2-$, $-L'-SiR_4R_5R_{10}-$, $-L'-(SiR_4R_5L')n-SiR_1R_2-$, alkenyl, alkynyl, aralkyl or and aralkyloxy radicals optionally substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, aralkyl, aralkyloxy, hydroxyl, aryl, aryloxy, halogen, amino and amino alkyl radicals, or each R_4 and/or R_5 may is independently be an $-O-Z(O)-L-$ group terminating with $-SiR_1R_2R_3$ and/or $-O-Z(O)-R_7$, where R_{10} is defined as is R_7 below, and wherein when R_4 or R_5 is selected as $-L'-(SiR_4R_5L')n-SiR_1R_2-$, the R_4 and R_5 groups attached to the silicon radical in the selected group are not themselves $-L'-(SiR_4R_5L')n-SiR_1R_2-$,

wherein each R_1 and R_2 may is independently selected from represent hydrogen, hydroxyl, alkyl, cycloalkyl, alkenyl, alkynyl, alkoxy, $-L'-SiR_4R_5R_{10}$, aryl, aryloxy, aralkyl or and aralkyloxy radical optionally substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, aralkyl, aralkyloxy, aryl, aryloxy, halogen, hydroxyl, amino and amino alkyl radicals, or each R_1 and/or R_2 may is independently [[be]] an $-O-Z(O)-L-$ group terminating with $-SiR_1R_2R_3$ and/or $-O-Z(O)-R_7$, where R_{10} is defined as is R_7 below,

wherein L represents a hydrocarbyl or substituted hydrocarbyl group, wherein said substituted hydrocarbyl is substituted by one or more substituents independently selected from the group consisting of alkyl, cycloalkyl, carboxyl, substituted carboxyl, alkoxy, aralkyl, aralkyloxy, aryl, aryloxy, hydroxyl, halogen, amino radical, and amino alkyl radicals radical, or and a polymer with pendant acid groups,

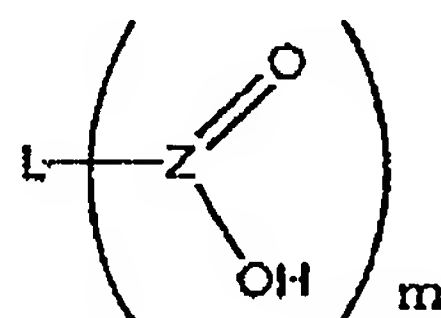
L' represents O, S, NR₆, or L- (NR₆-L)_p (where p = 1 to 10), where R₆ is defined as is R₇ below, or L.

each n independently represents a number of -Si(R₄)(R₅) - L' - groups from 0 to 1000,

and y represents a number of ~~silyl ester repeat units~~ from 2 to 100000,

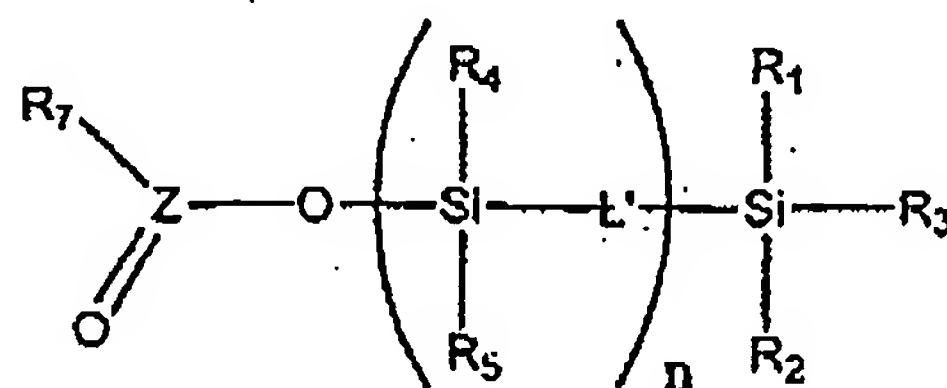
~~which wherein the~~ process comprises the step of reacting[{}:[]

a polyacid of formula (II)



(II)

wherein Z(O)OH represents the acid moiety attached to L, m is an integer from 2 to 100000, and L is as defined above, with a polyacyloxysilyl derivative of formula (III)



(III)

wherein R_1 , R_2 , R_4 , R_5 , L' and n are as defined above, except R_1 , R_2 , R_4 and R_5 in (II) are $-O-Z(O)-R_8$, where R_8 is defined as in R_7 below, when the equivalent group in (I) is $-O-Z(O)-L'$, and R_7 is a hydrogen atom, an aralkyl, aryl, alkenyl, alkynyl, or alkyl group optionally substituted with one or more substituents selected from the equivalent substituents as defined for R_1 , R_2 , R_4 and R_5 above,

and R_3 is the group $-O-Z(O)-R_9$, where R_9 is defined as is R_7 above,

whilst ~~while~~ removing the formed acid group(s) of formula (IV), and (V) and (VI),

$R_7 Z(O)OH$ (IV)

$R_9 Z(O)OH$ (V),

$R_8 Z(O)OH$ (VI),

from the system, wherein Z in formula (I), (II), (III), (IV), (V), and (VI) is independently C, POH, P or S-O||.

with a proviso that R_1 , R_2 , R_4 and R_5 in formula (III) is $-O-Z(O)-R_8$ when the equivalent group in formula (I) is $-O-Z(O)-L'$, wherein R_8 has the same definition as R_7 .

2. (Original) A process according to claim 1, wherein y is 2 to 1000.
3. (Previously Presented) A process according to claim 1, wherein R_4 and R_5 each independently represent alkyl, an alkoxy, an aryl, an hydroxyl group or $-L'-(SiR_4R_5 L')$ or $n-SiR_4R_5-$ group, wherein L' , R_1 , R_2 , R_4 and R_5 are as defined in claim 1.
4. (Original) A process according to claim 3, wherein $n = 0-100$.
5. (Original) A process according to claim 3, wherein $n = 0-10$.
6. (Original) A process according to claim 3, wherein n is 0 or 1.

7. (Previously Presented) A process according to claim 1, wherein R_4 and R_5 in formula (III) are each independently selected from the group consisting of an alkyl group, an hydroxyl group, an alkoxyl group and an $L'-(SiR_4R_5L')_n-SiR_1R_2-$ group, wherein L' , R_1 , R_2 , R_4 and R_5 are as defined in claim 1.
8. (Original) A process according to claim 7 wherein R_1 , R_2 , R_4 and R_5 each independently represent an alkyl group, branched or linear.
9. (Previously Presented) A process according to claim 1, wherein L' represents O.
10. (Previously Presented) A process according to claim 1, wherein Z represents C, POH, P or S-O.
11. (Previously Presented) A process according to claim 1, wherein R_1 , R_2 , R_4 , R_5 and R_8 are each independently selected from the group consisting of methyl, ethyl, propyl, isopropyl, isobutyl, n-butyl, sec-butyl, t-butyl, phenyl, and vinyl.
12. (Original) A process according to claim 11, wherein R_1 , R_2 , R_4 and R_5 are selected from the group consisting of methyl, ethyl, isopropyl, phenyl, and vinyl.
13. (Original) A process according to claim 11, wherein R_1 , R_2 , R_4 , R_5 and R_8 are methyl.
14. (Previously Presented) A process according to claim 1, wherein R_6 is methyl.
15. (Previously Presented) A process according to claim 1, wherein the groups R_1 and R_2 are the same.
16. (Previously Presented) A process according to claim 1, wherein the groups R_7 and R_9 are the same.
17. (Original) A process according to claim 16, wherein R_7 and R_9 are alkyl.

18. (Original) A process according to claim 16, wherein R_7 and R_9 are methyl.
19. (Original) A process according to claim 1, wherein the polyacid of formula (II) is a polycarboxylic acid.
20. (Original) A process according to claim 19, wherein the polycarboxylic acid is a dicarboxylic acid.
21. (Currently Amended) A process according to claim 1, wherein L represents an alkyl, aryl, alkenyl, alkynyl, or aralkyl radical, or a polymer comprising 1 to 10000 carbon atoms.
22. (Previously Presented) A process according to claim 1, wherein L represents $-(CH_2)_n-$, and n is an integer between 1 and 10.
23. (Original) A process according to claim 20, wherein the dicarboxylic acid is selected from adipic acid, oxalic acid, succinic acid, glutaric acid, phthalic or isophthalic or terephthalic acids, di-lactic acid, and rosinous dicarboxylic acids.
24. (Original) A process according to claim 1, wherein the polyacyloxysilyl derivatives of formula (III) are selected from tetraisopropyl-1,3-diacetoxydisiloxane, tetramethyl 1,3-diacetoxydisiloxane, dimethyldiacetoxysilane, diethyldiacetoxysilane, diphenyldiacetoxysilane, vinylmethyldiacetoxysilane, methyltriacetoxysilane, ethyltriacetoxysilane, vinyltriacetoxysilane, phenyltriacetoxysilane, tetraacetoxysilane, (butanoic acid, 1,3,5-triethyl-1,3,5-tripropyl-1,5-trisiloxanediyl ester), (1,5-trisiloxanediol, 1,3,5-triethyl-1,3,5-tripropyl-, dipropanoate), (2-silanaphthalen-2-ol, 1,2,3,4-tetrahydro-2-(7-hydroxy-1,1,3,3,5,5,7,7-octamethyltetrasiloxanoxy)-, diacetate), (2-silanaphthalen-2-ol, 1,2,3,4-tetrahydro-2-(5-hydroxy-1,1,3,3,5,5-hexamethyltrisiloxanoxy)-, diacetate), (2-silanaphthalen-2-ol, 1,2,3,4-tetrahydro-2-(3-hydroxy-1,1,3,3-tetramethyldisiloxanoxy)-, diacetate), (1,9-pentasiloxanediol, 1,3,5,7,9-pentamethyl-

1,3,5,7,9-pentavinyl-, diacetate), (1,7-tetrasiloxanediol, 1,3,5,7-tetraethenyl-1,3,5,7-tetramethyl-, diacetate), (1,7-tetrasiloxanediol, 1,1,3,3,5,5,7,7-octaethyl-, diacetate), (1,5-trisiloxanediol, 1,3,5-triethenyl-1,3,5-trimethyl-, diacetate), (heptasiloxane, 1,1,1,1,3,3,3,3-octaethoxy-3,3,5,5,7,7,9,9,11,11,13,13-dodecamethyl), (1,5-trisiloxanediol, 1,3,5-triethyl-1,3,5-trimethyl-, diacetate), (1,5-trisiloxanediol, 1,1,3,3,5,5-hexaethyl-, dibutyrate), (1,5-trisiloxanediol, 1,1,3,3,5,5-hexaethyl-, dipropionate), (1,5-trisiloxanediol, 1,3,5-triethyl-1,3,5-tripropyl-, diacetate), (1,5-trisiloxanediol, 1,1,3,3,5,5-hexaethyl-, diacetate), (1,1,1,7-tetrasiloxanetetrol, 3,3,5,5,7,7-hexamethyl-, triacetate), (1,5-trisiloxanediol, 1,1,3,5,5-pentamethyl-3-vinyl-, diacetate), (1-tetrasiloxanol, 7-acetyl-1,1,3,3,5,5,7,7-octamethyl-, acetate), (1-pentasiloxanol, 9-acetyl-1,1,3,3,5,5,7,7,9,9-decamethyl-, acetate; pentasiloxanol, 9-acetyl-1,1,3,3,5,5,7,7,9,9-decamethyl-, acetate), (1,9-pentasiloxanediol, decamethyl-, diacetate), (1,5-trisiloxanediol, hexamethyl-, diacetate), (1,17-nonasiloxanediol, octadecamethyl-, diacetate), (1,15-octasiloxanediol, hexadecamethyl-, diacetate), (1,7,13-heptasiloxanetriol, tridecamethyl-, triacetate), (1,1,7-tetrasiloxanetriol, 1,3,3,5,5,7,7-heptamethyl-, triacetate), (1,13-heptasiloxanediol, tetradecamethyl-, diacetate), (1,7-tetrasiloxanediol, 1,1,3,3,5,5,7,7-octamethyl-, diacetate), ditert-butyl diacetoxysilane, and ditert-butoxy diacetoxysilane.

25. (Previously Presented) A process according to claim 1, wherein the reaction is carried out in a suitable solvent.
26. (Currently Amended) A process as claimed in according to claim 25, wherein the solvent is selected from pentane, cyclopentane, hexane, cyclohexane, heptane, toluene, xylene, benzene, mesitylene, ethylbenzene, octane, decane, [[.]] decahydronaphthalene, diethyl ether, diisopropyl ether, diisobutyl ether, N,N-dimethylformamide, N-methylpyrrolidone, N,N-dimethylacetamide, and mixtures thereof.
27. (Currently Amended) A process according to claim 25, wherein the solvent forms a heterogeneous low boiling azeotrope with the distilled poly(silyl ester)s comprising the structural unit of the formula (I) acid product.

28. (Currently Amended) A process according to claim 1, wherein the molar ratio of the reactive groups present in the polyacyloxysilyl derivative ~~acid derivative to the reactive groups present in the acid~~ is between 1:100 and 100:1.
29. (Previously Presented) A process according to claim 1, wherein the solvent, where present, is at least 10 wt% of the total reaction mix at the start of the reaction.
30. (Previously Presented) A process according to claim 1, wherein the molecular weight is in the range 1000 to 1000000 kD.
31. (Original) A process according to claim 30, wherein the molecular weight is in the range 1000 to 100000 kD.
32. (Original) A process according to claim 30, wherein the molecular weight is in the range 1000 to 10000 kD.
33. (Previously Presented) A process according to claim 1, wherein m is 2.
34. (Currently Amended) A process according to claim 1, wherein each R_4 and R_5 is hydroxyl or is independently selected from alkyl, aryl, alkoxyl, aryloxy, $-L'-SiR_1R_2-$, $-L'-(SiR_4R_5 L')_n-SiR_1R_2-$, alkenyl, alkynyl, aralkyl σ and aralkyloxy radicals optionally substituted by one or more substituents independently selected from the $\{.,\}$ group consisting of alkyl, alkoxyl, aralkyl, aralkyloxy, hydroxyl, aryl, aryloxy, halogen, amino and amino alkyl radicals, or R_4 or R_5 may is independently be an $-O-C(O)-L-$ group terminating with $-SiR_1R_2R_3$ and/or $-(O-Z(O))-R_7$, and wherein when R_4 or R_5 is selected as $-L'-(SiR_4R_5 L')_n-SiR_1R_2-$, the R_4 and R_5 groups attached to the silicon radical in the selected group are not themselves $-L'-(SiR_4R_5 L')_n-SiR_1R_2-$;

wherein each R_1 and R_2 may is independently selected from ~~represent~~ hydrogen, hydroxyl, alkyl, alkenyl, alkynyl, alkoxyl, aryl, aryloxy, aralkyl σ and aralkyloxy radical

optionally substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, aralkyl, aralkyloxy, aryl, aryloxy, halogen, hydroxyl, amino and amino alkyl radicals, or R_1 or R_2 may is independently selected from be an $-O-C(O)-$ L- group terminating with $-Si(R_1R_2R_3)$ and/or $-O-Z(O)-R_7$.

wherein L represents a hydrocarbyl or substituted hydrocarbyl group, wherein said substituted hydrocarbyl is substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, aralkyl, aralkyloxy, aryl, aryloxy, hydroxyl, halogen, amino and amino alkyl radicals, or a polymer with pendant acid groups; and

L' represents O, S, or NR_6 , where R_6 is defined as is R_7 , or L.

35. (Previously Presented) A process according to claim 1 which includes the additional step of incorporating the polymer in a film or coating composition.
36. (Canceled)
37. (Currently Amended) A film or coating comprising a polymer ~~[[as]]~~ prepared or obtainable by ~~[[a]]~~ the process as defined in of claim 1.
38. (Currently Amended) A poly(silyl ester) prepared ~~or obtainable by [[a]]~~ the process ~~[[as]]~~ defined in of claim 1.
39. (Currently Amended) A coating or film composition comprising a poly(silyl ester) ~~[[as]]~~ prepared ~~or obtainable by [[a]]~~ the process in accordance with of claim 1.
40. (Previously Presented) A poly (silyl ester) comprising the repeating group (I) as defined in claim 1, and wherein L is a polylactic acid or substituted polylactic acid residue or a rosin or substituted rosin residue of a polycarboxylic acid.

41. (Original) A coating or film composition comprising a poly(silyl ester) according to claim 40.
42. (Previously Presented) A coating or film composition according to claim 39 wherein the composition is an antifouling coating or film composition.
43. (Previously Presented) A coating or film composition according to claim 39 wherein the composition is suitable for use in medical and/or veterinary applications to provide controlled release of a bioactive substance.
44. (Currently Amended) A film or coating comprising a poly(silyl ester) ~~||as|| prepared or obtainable by ||a|| the process in accordance with of~~ claim 34.
45. (Previously Presented) An implantable medical and/or veterinary device having a coating comprising a coating or film composition according to claim 39.
46. (Previously Presented) A process according to claim 1, wherein in the definitions of R_1 , R_2 , R_4 or R_5 , the amino radical is a tertiary amino radical.
47. (Previously Presented) A process according to claim 10, wherein Z represents C.
48. (Previously Presented) A process according to claim 22, wherein L represents $-(CH_2)_n-$, and n is an integer between 2 and 8.
49. (Previously Presented) A process according to claim 22, wherein L represents $-(CH_2)_n-$, and n is an integer between 4 and 6.
50. (Previously Presented) A process according to claim 22, wherein L represents $-(CH_2)_n-$, and n is 4.

51. (Previously Presented) A coating or film composition according to claim 41 wherein the composition is suitable for use in medical and/or veterinary applications to provide controlled release of a bioactive substance.
52. (Previously Presented) An implantable medical and/or veterinary device having a coating comprising a coating or film composition according to claim 41.